



U.S. Department of Energy
Energy Efficiency and Renewable Energy

The Role of Utility Rebate Programs in Performance Contracting

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Challenge

The use of energy efficient products and operation of energy efficient buildings systems has a larger impact upon the environment than any other technology!





Objectives of Energy Efficiency Programs

Transform the market toward energy efficiency design and practice

- Easy participation for customers and market actors

Educate customers and provide incentives to stimulate participation

- Offer education and training initiatives
- Expand understanding of design options

Improve overall standard practices design and installations



Utility Rebates and common Q / A

Rebate dollars

1. Are funded by rate payers \$0.0025 per kWh
2. Only pay a portion of cost
3. Are from investor owned utilities regulated by DTE
4. Are paid after the job is complete
5. Are for cost effective electric savings
6. Are for cost effective natural gas savings
7. "Do Not" pay for fuel switching or DG



Utility Program Overview



2005 C&I Programs

NSTAR Electric Programs

- ✓ Construction Solutions
 - ✓ Focus on Time-Dependent projects
- ✓ Business Solutions
 - ✓ Retrofit projects performed for the purpose of energy savings
- ✓ Small Business Solutions
 - ✓ Turn-Key retrofit projects for customers >100 kW

NGRID Electric Programs

- ✓ Design 2000plus+
 - ✓ Focus on Time-Dependent projects
- ✓ Energy Initiative
 - ✓ Retrofit projects performed for the purpose of energy savings
- ✓ Small Business Solutions
 - ✓ Turn-Key retrofit projects for customers >200 kW

Regional Market Transformation Initiatives

NSTAR - Keyspan Gas Programs

Gas Networks

MOTORUP

Custom Program



Program Applications

Prescriptive applications reflect simple incentive levels

- Commercial and Industrial Lighting
- Variable Speed Drives
- LED Traffic Signals
- Motor & VFD combination application
- Vending Machine Miser application
- Energy Efficient Lighting: prescriptive applications by space type
- 30 to 300 tons HVAC prescriptive: addresses Evaporative Chillers
- High Performance lighting
- Many more



Construction Solutions

Tracks:

- Equipment replacement
- New Construction

Financial Incentives:

- Up to 90% incremental costs
 - 100% cost for technical assistance engineering and commissioning service*
- Cap: \$750,000/project

Technologies – lighting, HVAC, VSD's Motors, custom
Examines project as an integrated system

- Must involve full design team early or schematic phase
- (architect, mechanical engineer, electrical engineer).
- Study and application must be completed prior to final construction documents

*Subject to Utility pre approval and cost benefit analysis on electric savings



Program Enhancements - NSTAR

Code-Plus Lighting

- ✓ Construction Solutions Program only

Limited to a new structures or existing building
undergoing major rehabilitation

20% better than MA. Energy Code requirements on
a watts/sq.ft. basis

Incentive \$/sq.ft.



Is this your building?

A photograph of a large indoor facility, likely a school or community center, featuring a climbing wall on the left and a basketball hoop on the right. The ceiling is high with exposed metal trusses and skylights. Sunlight is streaming in through the skylights, illuminating the space. The text "The best savings are – turning the lights off when the sun shines in!" is overlaid in yellow at the bottom.

The best savings are – turning the lights off when the sun shines in!



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Why are these lights on?





Daylight Controls





Financial incentives

- On average 40% - 50% of total costs
- Cap: \$500,000/project
- Shared cost for technical assistance engineering and commissioning service*

Technologies – lighting, controls, VSD's, motors, HVAC, building envelope measures, custom

*Subject to NSTAR cost benefit analysis on electric savings



Barberi School - Framingham



Standard Lighting

Lamp & Ballast Retrofit using Super
T-8 Technology

Annual savings of 39,972 kWh or
approximately \$5,000

Rebate of \$42,030

Payback less than 2 years



Small Business Solutions

Turnkey retrofit services for facilities < 100 kW

- Identification, direct installation, and education of energy efficient alternatives
- Dedicated vendors that have been secured through a competitive bid process

Financial Incentives

- 80% of total costs

Technologies – lighting, controls, HVAC tune-ups, and refrigeration/cooler controls



Technical Assistance

As part of its Energy Efficiency programs, NSTAR MECo & WMECo as well as Keyspan and NSTAR Gas provide technical assistance and other technical services. These services allow us to bring qualified technical consultants to a customer's facilities to help identify, evaluate, and present electrical energy conservation measures. The costs of these Engineering Services are typically equally shared between the utility and the customer.





Educational Tools/Training

Energy Star Benchmarking
Compressed Air Challenge
HVAC Pilot for existing systems
Other Training initiatives

(Check with your utilities)



Energy Star Benchmarking

EPA-sponsored program that provides whole-building performance benchmarking services which allow customers the ability to set energy performance targets and plan energy efficiency improvements

- Available for free on-line at www.energystar.gov
- NSTAR to hire contractor to work with NSTAR customers to develop / scope energy star benchmarking case studies



Gas Programs

» Custom Program

- Condensing Boilers/Furnaces
- Direct Contact Water Heaters,
- Combustion Controls
- Engineering Study Funding



Gas Programs

» GASNETWORKS (statewide program)

- Small C&I High Efficiency Heating
- Small C&I High Efficiency Water Heating
- C&I Infrared Heating Equipment



Is this how you control heat?



Summary/Next Steps

Require EE in your contract documents

- Work with Procurement Dept and architects / consultants.

Take advantage of financial incentives (third party evaluation of measures)

Contact your Utility as soon as project knowledge becomes available

NGRID - 1-800-322-3223 or [http://www. Masselectric.com](http://www.Masselectric.com)
Electric Programs for business

NSTAR - (781) 441-8592 or www.nstaronline.com
Electric or Gas Programs for business

Keyspan - (732)584-0255 <http://www.keyspanenergy.com>
Gas Energy Programs

Sign up for great training opportunities!

Utilize educational tools!



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Questions?
Thank you!

Contact us at:
781-441-8592
www.nstaronline.com